



FACSIMILE

PHILADELPHIA
One Liberty Place, 46th Floor
Philadelphia, PA 19103
215-568-3100
Fax: 215-568-3439

SEATTLE
999 Third Avenue, Suite 1606
Seattle, WA 98104
206-332-1380
Fax: 206-624-7317

DATE: August 27, 2004

JOB CODE: 83439

Please deliver this and the following pages to:

Examiner: **Ardin H. Marschel**

U.S.P.T.O. Group Art Unit: **1631**

Telecopier No.: **571-273-0718**

U.S. Serial No.: **08/973,381**

Client/Matter No.: **ISIS-2297**

Sender's Name: **Jeffrey H. Rosedale**

Pages to Follow: **19**

If transmission is not complete, please call our **Philadelphia Office** at **(215) 568-3100**.

COVER MESSAGE:

OFFICIAL FACSIMILE. PLEASE DELIVER TO EXAMINER IMMEDIATELY.

Attached hereto is/are the following documents:

- 1) Copy of Auto-Reply Facsimile Transmission from USPTO dated August 11, 2004
- 2) Copy of Facsimile coversheet to Examiner Ardin H. Marschel dated August 11, 2004 from Jeffrey H. Rosedale
- 3) Copy of Communication Regarding Information Disclosure Statement dated and signed August 11, 2004
- 4) Clean copy of the Form PTO-1449 for your signature of reference lettered EN

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERY OF THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

WOODCOCK WASHBURN LLP
A Partnership Including Professional Corporations
www.woodcock.com

Auto-Reply Facsimile Transmission



TO:

Fax Sender at +2155683439

Fax Information

Date Received:


8/11/2004 11:56:24 AM [Eastern Daylight Time]

Total Pages:

109 (including cover page)

ADVISORY: This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received
Cover
Page
=====>

 <p>WOODCOCK WASHBURN INTELLECTUAL PROPERTY LAW</p>		<p>T-968 P.001 F-343</p> <p>One Liberty Place, 48th Floor Philadelphia, PA 19103 215-568-3100 Fax 215-568-3439</p> <p>180 Third Avenue, 2nd Floor South, PA 19106 215-568-1300 Fax 215-568-7877</p>
<p>FACSIMILE</p>		<p>RECEIVED</p> <p>AUG 11 2004</p> <p>Woodcock Washburn</p>
<p>DATE: August 11, 2004</p> <p>Please deliver this and the following pages to:</p> <p>Name: Examiner Arden H. Marshall</p> <p>Company/Firm: U.S. Patent and Trademark Office</p> <p>Telecopier No.: 703-672-9306</p> <p>Client/Matter no.: 2575-2197</p> <p>Sender's Name: Jeffrey H. Beesdale</p> <p>Pages to Follow: 108</p> <p>If transmission is not complete, please call our Philadelphia Office at (215) 568-3100.</p> <p>COVER MESSAGE: Pursuant to your request, attached is a Communication Regarding the Information Disclosure Statement, a copy of the resumed postcard date-stamped December 18, 1998, copy of the signed and dated Information Disclosure Statement and a clean copy of the Form PTO-1449 for your signature of reference entered EN.</p> <p><small>THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE ADDRESSEE OR PARTY TO WHOM IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS UNCLASSIFIED, CONFIDENTIAL, AND SUBJECT TO PROSECUTION UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE READER IS AN AGENT RESPONSIBLE FOR DELIVERY OF THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, REPRODUCTION OR COPYING OF THE INFORMATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE, THRU FIRST CLASS MAIL.</small></p> <p>WOODCOCK WASHBURN LLP A Partnership Including Professional Corporations www.woodcock.com</p> <p>PAGE 1/108 * RCVD AT 8/11/2004 11:56:24 AM [Eastern Daylight Time] * SVR:USPTO-EFXXF-3/24 * DNIS:2730718 * CSID:+2155683439 * DURATION (mm-ss):23-34</p>		

AUG 11 PM12:29



FACSIMILE

DATE: **FAXED** August 11, 2004

Please deliver this and the following pages to:

Name: **Examiner Ardin H. Marschel**
Company/Firm: **U.S. Patent and Trademark Office**
Telecopier No.: **703-872-9306**
Client/Matter No.: **ISIS-2297**
Sender's Name: **Jeffrey H. Rosedale**
Pages to Follow: **108**

If transmission is not complete, please call our **Philadelphia Office** at (215) 568-3100.

COVER MESSAGE: Pursuant to your request, attached is a Communication Regarding the Information Disclosure Statement, a copy of the returned postcard date-stamped December 18, 1998, copy of the signed and dated Information Disclosure Statement and a clean copy of the Form PTO-1449 for your signature of reference lettered EN.

PHILADELPHIA
One Liberty Place, 46th Floor
Philadelphia, PA 19103
215-568-3100
Fax: 215-568-3439
SEATTLE
999 Third Avenue, Suite 1606
Seattle, WA 98104
206-332-1380
Fax: 206-624-7317

JOB CODE:

47533

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERY OF THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

WOODCOCK WASHBURN LLP
A Partnership Including Professional Corporations
www.woodcock.com

RECEIVED
CENTRAL FAX CENTER

DOCKET NO.: ISIS-2297

AUG 31 2004

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Normand Herbert

Application No.: 08/973,381

Filing Date: March 25, 1998

Confirmation No.: 6836

Group Art Unit: 1631

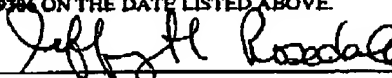
Examiner: Ardian H. Marschel

For: OLIGOMERIC AMINODIOL-CONTAINING COMPOUNDS, LIBRARIES
THEREOF, AND PROCESS OF PREPARING THE SAME

CERTIFICATE OF FACSIMILE TRANSMISSION

DATE: August 11, 2004

I HEREBY CERTIFY THAT THIS PAPER IS BEING
FACSIMILE TRANSMITTED TO THE PATENT AND
TRADEMARK OFFICE TO FACSIMILE NUMBER 703-
872-9386 ON THE DATE LISTED ABOVE.


Jeffrey H. Rosendale
Reg. No. 46,018

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

COMMUNICATION REGARDING
INFORMATION DISCLOSURE STATEMENT

- ☐ In the Office Action dated , the Examiner indicated that references were not considered because copies of those references were not found in the parent application file. Enclosed are copies of references that were listed on the PTO Form 1449 originally filed , a copy of which is attached to this communication. A copy of the date-stamped postcard dated is also attached. Accordingly, Applicants believe no fee is due for providing copies of these references.
- ☒ Initialed copies of the 1449 sent with the Information Disclosure Statement dated December 15, 1998, were attached to the Official Action dated August 1, 2000. However, Applicants note that the Examiner did not initial and/or sign Page 11

DOCKET NO.: ISIS-2297**PATENT**

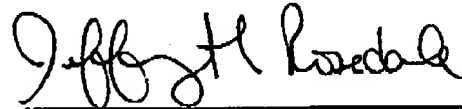
(reference letter EN of the PTO-1449. As this appears to be an administrative oversight, it is respectfully requested that the Examiner initial and date this page of the 1449 confirming that the references citing thereon have been considered. A clean copy of the PTO-1449 is enclosed for the Examiner's convenience along with a PTO date-stamped copy of the Returned Postcard.

Further, applicants would like to advise the Examiner that the following U.S. Serial Numbers have issued since the filing of the Information Disclosure Statement referenced above:

Serial Number**Patent Number**

The Commissioner is authorized to charge payment of any fees associated with this communication and to refund any overpayment associated with this communication or during the pendency of this application to deposit account 23-3050.

Date: August 11, 2004



Jeffrey H. Rosedale
Registration No. 46,018

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

© 2004 WW

**RECEIVED BY THE UNITED STATES
PATENT AND TRADEMARK OFFICE**

Paper: Information Disclosure Statement (w/first class stamp, in dupl.); USPTO Form 1449 (11 Sheets); 119 References Cited / 70 Copies Submitted; Supplemental Information Disclosure Statement (w/first class stamp, in dupl.); USPTO Form 1449 (1 Sheet); 3 References Cited / All Copies Submitted; Postcard

Applicant(s): Normand Herbert

Title: COMBINATORIAL LIBRARIES HAVING AMINODIOL MONOMER SUBUNITS

Serial No.: 08/973,381

Filed: March 25, 1998

Docket No.: ISIS-2297 (MPS/ijkeeler)

Date Sent: December 15, 1998



DOCKET NO.: ISIS-2297

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Normand Herbert

Serial No.: 08/973,381

Group Art Unit: Not Yet Assigned

Filing Date: March 25, 1998

Examiner: Not Yet Assigned

**For: COMBINATORIAL LIBRARIES HAVING AMINODIOL MONOMER
SUBUNITS**

Date of deposit: December 15, 1998
I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail, postage prepaid on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Michael F. Straher
Typed Name: Michael F. Straher
Registration No.: 38,325

Assistant Commissioner for Patents
Washington DC 20231

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

- ☒ In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

K:\UFORMS\IDS\INFO-DIS.ST

DOCKET NO.: ISIS-2297

- 2 -

PATENT

- ☐ In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with ☐the first or ☐second After Final Submission, therefore:
- ☐ Certification in Accordance with §1.97(e) is attached; or
- ☐ The fee of \$240.00 as set forth in §1.17(p) is attached.
- ☐ In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
- ☐ Certification in Accordance with §1.97(e) is attached; or
- ☐ The fee of \$240.00 as set forth in §1.17(p) is attached.
- ☐ In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(i)(1).
- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith EXCEPT THAT:
- ☒ In view of the voluminous nature of references BG, BJ, BZ, CD, and CL, and the likelihood that these references were available to the Examiner, copies were not enclosed in prior application Serial No. 08/180,134.

K:\LA\FORMS\USDS\INFO-DIS.ST

DOCKET NO.: ISIS-2297

- 3 -

PATENT

- ☒ In accordance with §1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. §120 have been made in the instant application:
- ☒ Copies of references AA-BE, DM-DN, and DW-EG listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 08/483,311, filed June 7, 1995; Copies of references BF-DD and DO-DQ listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 08/180,134, filed January 11, 1994 (reference copies are also attached with this filing); Copies of references DE-DL, DR-DV, and EH-EO listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 08/179,970, filed January 11, 1994 (reference copies are also attached with this filing).
- ☒ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.

This form is submitted in duplicate.

There are no listed references which are not in the English language.

Date:

December 15, 1998

Michael P. Straher

Registration No. 38,325

WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

© 1997 WWTM

K:\UNIFORMS\IDS\INFO-DIS.ST

Sheet 1 of 11

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. ISIS-2297	Serial No. 08/973,381
		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AA	Atherton et al., "The Fluorenylmethoxycarbonyl Amino Protecting Group", Chapter 1 in <u>The Peptides</u> , Gross and Meienhofer, Eds., Academic Press, New York, 1987, 9, 1-38	
	AB	Augustyns, K. et al., "Influence of the Incorporation of (S)-9-(3,4-dihydroxy-butyl)adenine on the Enzymatic Stability and Base-Pairing Properties of Oligodeoxynucleotides", <i>Nucl. Acids Res.</i> , 1991, 19(10), 2587-2593	
	AC	Carell, T. et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules", <i>J. Angew. Chem. Int. Ed. Engl.</i> , 1994, 33, 2059-2061	
	AD	Carell, T. et al., "A Solution-Phase Screening Procedure for the Isolation of Active Compounds from a Library of Molecules", <i>Angew. Chem. Int. Ed. Engl.</i> , 1994, 33, 2061-2064	
	AE	Chen et al., "Analogous Organic Synthesis of Small-Compound Libraries: Validation of Combinatorial Chemistry in Small-Molecule Synthesis", <i>J. Am. Chem. Soc.</i> , 1994, 116, 2661-2662	
	AF	Cossy, J. et al., "Formation of Optically Active 3-Hydroxypiperidines", <i>Tetrahedron Letters</i> , 1995, 36(4), 549-552	
	AG	DeWitt, S. et al., "Diversomers": An Approach to Nonpeptide, Nonoligomeric Chemical Diversity", <i>PNAS USA</i> , 1993, 90, 6909-6913	
	AH	Ezquerro, J. et al., "Short and Efficient Enantioselective Synthesis of <i>cis</i> and <i>trans</i> Pyrrolidine-2,5 Dicarboxylic Acids", <i>Tetrahedron Letters</i> , 1993, 34(31), 4989-4992	
	AI	Garegg, P. et al., "Nucleoside Hydrogenphosphonates in Oligonucleotide Synthesis", <i>Chemica Scripta</i> , 1986, 26, 159-62	
	AJ	Farooqui, F. et al., "Effect of Structural Variations in Cholesteryl-Conjugated Oligonucleotides on Inhibitory Activity toward HIV-1", <i>Bioconjugate Chem.</i> , 1991, 2, 422-426	
	AK	Froehler, B., "Deoxynucleoside H-Phosphonate Diester Intermediates in the Synthesis of Internucleotide Phosphate Analogues", <i>Tetrahedron Letters</i> , 1986, 27(46), 5575-5578	
	AL	Froehler, B. et al., "Nucleoside H-Phosphonates: Valuable Intermediates in the Synthesis of Deoxyoligonucleotides", <i>Tetrahedron Letters</i> , 1986, 27(4), 469-472	
EXAMINER		DATE CONSIDERED	

Sheet 2 of 11

Form PTO-1449 Modified		Docket No. ISIS-2297	Serial No. 08/973,381
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AM	Gryaznov, S.M. and Sokolova, N.I., "A New Method for the Synthesis of Oligodeoxyribonucleotides Containing Internucleotide Phosphoramidate Bonds", <i>Tetrahedron Letters</i> , 1990, 31, 3205-3208	
	AN	Gryaznov, S. and Potapov, "A New Approach to the Synthesis of Oligodeoxyribonucleotides with Alkylamino Groups Linked to Internucleotide Phosphate Groups", <i>Tetrahedron Letters</i> , 1991, 32(30), 3715-3718	
	AO	Hebert et al., "Synthesis of N-Substituted Hydroxyprolinol Phosphoramidites for the Preparation of Combinatorial Libraries", <i>Tetra. Lett.</i> , 1994, 35(51), 9509-9512	
	AP	Iso, Y. et al., "Synthesis of Viologen-tagged Oligodeoxynucleotides", <i>Tetrahedron Letters</i> , 1992, 33(4), 503-506	
	AQ	Jung, P. et al., "Hybridization of Alternating Cationic/Anionic Oligonucleotides to RNA Segments", <i>Nucleosides & Nucleotides</i> , 1994, 13(6&7), 1597-1605	
	AR	Letsinger, R. et al., "Cationic Oligonucleotides", <i>J. Am. Chem. Soc.</i> , 1988, 110, 4470-4471	
	AS	Look, G. et al., "Trimethylorthoformate: A Mild and Effective Dehydrating Reagent for Solution and Solid Phase Imine Formation", <i>Tetrahedron Letters</i> , 1995, 36(17), 2937-2940	
	AT	Ohlmeyer, M. et al., "Complex Synthetic Chemical Libraries Indexed With Molecular Tags", <i>PNAS USA</i> , 1993, 90, 19022-10926	
	AU	Peterson et al., "Synthesis and Biological Evaluation of 4-Purinylypyrrolidine Nucleosides", <i>J. Med. Chem.</i> , 1991, 34, 2787-2797	
	AV	Pon, R.T., "Solid-Phase Supports in Oligonucleotide Synthesis", <i>Protocols for Oligonucleotides and Analogs: Synthesis and Properties</i> , Chapter 19, Agrawal, S., Ed., Humana Press, 1993	
	AW	Ritter, A. and Miller, "Amino Acid-Derived Chiral Acyl Nitroso Compounds: Diastereoselectivity in Intermolecular Hetero Diels-Alder Reactions", <i>J. Org. Chem.</i> , 1994, 59, 4602-4611	
	AX	Ritter, A. and Miller, "Asymmetric Syntheses of Novel Amino Acids and Peptides from Acylnitroso-Derived Cycloadducts", <i>Tetrahedron Letters</i> , 1994, 35(50), 9379-9382	
EXAMINER		DATE CONSIDERED	

Sheet 3 of 11

Form PTO-1449 Modified		Docket No. ISIS-2297	Serial No. 08/973,381
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AY	Saab, N. et al., "Synthesis and Evaluation of Unsymmetrically Substituted Polyamine Analogues as Modulators of Human Spermidine/Spermine-N'-Acetyltransferase (SSAT) and as Potential Antitumor Agents", <i>J. Med. Chem.</i> , 1993, 36, 2998-3004	
	AZ	Samukov, V. et al., "2-(4-Nitrophenyl) sulfonylthoxycarbonyl(Nsc) Group as a Base-Labile α -Amino Protection for Solid Phase Peptide Synthesis", <i>Tetrahedron Letters</i> , 1994, 35(42), 7821-7824	
	BA	Simon, R. et al., "Peptoids: A Modular Approach to Drug Discovery", <i>PNAS USA</i> , 1992, 89, 9367-9371	
	BB	Takahashi et al., "Preparation of New Chiral Pyrrolidine-bisphosphines as Highly Effective Ligands for Catalytic Asymmetric Synthesis of R-(-)-Pantolactone", <i>Tetra. Lett.</i> , 1986, 27(37), 4477-4480	
	BC	Takeda et al., "Practical Asymmetric Synthesis of (R)-(-)-Phenylephrine Hydrochloride Catalyzed by (2R, 4R)-MCCPM- Rhodium Complex", <i>Tetra. Lett.</i> , 1989, 30(3), 367-370	
	BD	Verhart, C.G. and Tesser, "New Base-labile Amino-protective Groups for Peptide Synthesis", <i>Recueil des Travaux Chimiques des Pays-Bas</i> , 1988, 107, 621-626	
	BE	Zuckermann, R. et al., "Efficient method for the preparation of peptoids [oligo(N-substituted glycines)] by submonomer solid-phase synthesis", <i>J. Am. Chem. Soc.</i> , 1992, 114, 10646-10647	
EXAMINER		DATE CONSIDERED	

Sheet 4 of 11

Form PTO-1449 Modified		Docket No. ISIS-2297	Serial No. 08/973,381
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
....	BF	Achari, <i>et al.</i> , "Facing up to Membranes: Structure/Function Relationships in Phospholipases", <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 1987, L11, 441-452	
*	BG	Agrawal, S., ed., "Protocols for Oligonucleotides and Analogs", Humana Press, New Jersey, 1993	
	BH	Alul, <i>et al.</i> , "Oxalyl-CPG: A Liable Support for Synthesis of Sensitive Oligonucleotide Derivatives", <i>Nucl. Acids Res.</i> , 1991, 19, 1527-1532	
	BI	Beaucage <i>et al.</i> , "Advances in the Synthesis Oligonucleotides by the Phosphoramidite Approach", <i>Tetra. Lett.</i> , 1992, 48, 2223-2311	
*	BJ	Bodanszky, M., "Principles of Peptide Synthesis", <i>Springer-Verlag. Berlin-New York</i> , 1984	
	BK	Bomalaski, J. <i>et al.</i> , "Human extracellular recombinant phospholipase A ₂ induces an inflammatory response in rabbit joints", <i>J. Immunology</i> , 1991, 146, 3904-3910	
	BL	Bouzard, D. <i>et al.</i> , "Fluoronaphthyridines and quinolones as antibacterial agents. 2. synthesis and structure-Activity relationships of new 1-tert-butyl 7-substituted derivatives", <i>J. Med. Chem.</i> , 1990, 33, 1344-1352	
	BM	Braish, T. <i>et al.</i> , "Synthesis of (S,S)-and (r,R)-2-Alkyl-2,5-diazabicyclo[2.2.1]heptanes", <i>J. Org. Chem.</i> , 1990, 55, 1684-1687	
	BN	Bridges, R. <i>et al.</i> , "Conformationally defined neurotransmitter analogues. Selective inhibition of glutamate uptake by one pyrrolidine-2,4-dicarboxylate diastereomer", <i>J. Med. Chem.</i> , 1991, 34, 717-725	
	BO	Burack, W. <i>et al.</i> , "Role of lateral phase separation in the modulation of phospholipase A ₂ activity", <i>Biochemistry</i> , 1993, 32, 583-589	
	BP	Campbell, <i>et al.</i> , "Inhibition of Phospholipase A ₂ ; a Molecular Recognition Study", <i>J. Chem. Soc., Chem. Commun.</i> , 1988, 1560-1562	
	BQ	Cho <i>et al.</i> , "The Chemical Basis for Interfacial Activation of Monomeric Phospholipases A ₂ ", <i>J. Biol. Chem.</i> , 1988, 263, 11237-11241	
EXAMINER		DATE CONSIDERED	

*A copy of this reference was not forwarded to the U.S. Patent and Trademark Office since it was believed to be too voluminous and easily obtainable by the Examiner.

Sheet 5 of 11

Form PTO-1449 Modified		Docket No. ISIS-2297	Serial No. 08/973,381
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	BR	Cooper et al., "A Route to Optically Active Trisubstituted Pyrrolidines using Claisen Rearrangements of Azalctones", <i>Tetrahedron Letters</i> , 1987, 28, 3031-3034	
	BS	Davidson et al., "1-Stearyl,2-Stearoylaminodeoxy Phosphatidylcholine, A Potent Reversible Inhibitor Of Phospholipase A ₂ ", <i>Biochem. Biophys. Res. Commun.</i> , 1986, 137, 587-592	
	BT	Davidson et al., "Inhibition of Phospholipase A ₂ by "Lipocortins" and Calpactins", <i>J. Biol. Chem.</i> , 1987, 262, 1698-1705	
	BU	Dennis, "Phospholipases", in "The Enzymes", Boyer, P.D., ed., Academic Press, 1983, Vol. 16, Chapter 9, pp. 307-353	
	BV	Ecker, et al., "Rational Screening of Oligonucleotide Combinatorial Libraries for Drug Discovery", <i>Nucl. Acids Res.</i> , 1993, 21, 1853-1856	
	BW	Englisch, U. and Gauss, D.H., "Chemically Modified Oligonucleotides as Probes and Inhibitors", <i>Angewandte Chemie, Int. Ed.</i> , 1991, 30, 613-629	
	BX	Franson, et al., "Phospholipid metabolism by phagocytic cells. Phospholipases A ₂ associated with rabbit polymorphonuclear leukocyte granules", <i>J. Lipid Res.</i> , 1974, 15, 380-388	
	BY	Freeman, J.P., ed., "Reduction of alpha-amino Acids: L-Valinol", in <u>Organic Syntheses</u> , New York: John Wiley & Sons, Inc., 530-533, 1990	
*	BZ	Gait, M.J., ed., <u>Oligonucleotide Synthesis, A Practical Approach</u> , Oxford: IRL Press, 1984	
	CA	Geysen, et al., "Strategies for epitope analysis using peptide synthesis", <i>J. Immun. Meth.</i> , 1987, 102, 259-274	
	CB	Glaser, et al., "Phospholipase A ₂ enzymes: regulation and inhibition", <i>TIPS Review</i> , 1993, 14, 92-98	
	CC	Grainger, et al., "An enzyme caught in action: direct imaging of hydrolytic function and domain formation of phospholipase A ₂ in phosphatidylcholine monolayers", <i>FEBS Letters</i> , 1989, 252, 73-82	
EXAMINER		DATE CONSIDERED	

*A copy of this reference was not forwarded to the U.S. Patent and Trademark Office since it was believed to be too voluminous and easily obtainable by the Examiner.

Sheet 6 of 11

Form PTO-1449 Modified		Docket No. ISIS-2297	Serial No. 08/973,381
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
*	CD	Green et al. in "Protective Groups in Organic Synthesis", 2nd Ed., John Wiley & Sons, New York, 1991	
	CE	Houghten, et al., "Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery", <i>Nature</i> , 1991, 354, 84-86	
	CF	Jaeger, et al., "Pyrrolidinediols. 1-Substituted 3-Hydroxymethyl-4-hydroxypyrrolidines and Derivatives", <i>J. Organic Chem.</i> , 1965, 30, 740-744	
	CG	Jordis, U. et al., "Synthesis of (1R,4R)- and (1S,4S)-2,5-diazabicyclo[2.2.1]heptanes and their n-substituted derivatives", <i>Synthesis</i> , 1990, 925-930	
	CH	Kroschwitz, J.I., "Polynucleotides", in "Concise encyclopedia of polymer science and engineering", 1990, Wiley-Interscience Publication, 858-859	
	CI	Lombardo et al., "Cobra Venom Phospholipase A ₂ Inhibition by Manoalide", <i>J. Biol. Chem.</i> , 1985, 260, 7234-7240	
	CJ	Märki, F. et al., "Differential inhibition of human secretory and cytosolic phospholipase A ₂ ", <i>Agents Actions</i> , 1993, 38, 202-211	
	CK	McKennon, M.J. and Meyers, A.I., "A Convenient Reduction of Amino Acids and Their Derivatives", <i>J. Org. Chem.</i> , 1993, 58, 3568-3571	
*	CL	Mellor, D.P., "Chemistry of Chelation and Chelating Agents in International Encyclopedia of Pharmacology and Therapeutics", Section 70, "The Chelation of Heavy Metals", Levine, W.G., ed., New York, Pergamon Press, 1979	
	CM	Miyake, A. et al., "The Novel Natural Product YM-26567-1 [(+)-trans-4-(3-dodecanoyl-2,4,6-trihydroxyphenyl)-7-hydroxy-2-(4-hydroxyphenyl)chroman]: A Competitive Inhibitor of Group II Phospholipase A ₂ ", <i>J. Pharm. Exp. Therap.</i> , 1992, 263, 1302-1307	
EXAMINER		DATE CONSIDERED	

*A copy of this reference was not forwarded to the U.S. Patent and Trademark Office since it was believed to be too voluminous and easily obtainable by the Examiner.

Sheet 7 of 11

Form PTO-1449 Modified		Docket No. ISIS-2297	Serial No. 08/973,381
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	CN	Noel, J.P. <i>et al.</i> , "Phospholipase A ₂ Engineering. 3. Replacement of Lysine-56 by Neutral Residues Improves Catalytic Potency Significantly, Alters Substrate Specificity, and Clarifies the Mechanism of Interfacial Recognition", <i>J. Am. Chem. Soc.</i> , 1990, 112, 3704-3706	
	CO	Oinuma, H. <i>et al.</i> , "Synthesis and biological evaluation of substituted benzenesulfonamides as novel potent membrane-bound phospholipase A ₂ inhibitors", <i>J. Med. Chem.</i> , 1991, 34, 2260-2267	
	CP	Owens, R. <i>et al.</i> , "The rapid identification of HIV protease inhibitors through the synthesis and screening of defined peptide mixtures", <i>Biochem & Biophys. Res.</i> , 1991, 181(1), 402-408	
	CQ	Pruzanski <i>et al.</i> , "Enzymatic Activity and Immunoreactivity of Extracellular Phospholipase A ₂ in Inflammatory Synovial Fluids", <i>Inflammation</i> , 1992, 16, 451-457	
	CR	Remuzon <i>et al.</i> , "Preparation of (6R)-(1R,4R)-6-Methyl-2-(p-Toluene-sulfonyl)-5-Phenylmethyl-2,5-Siazabicyclo[2.2.1]Heptanes, Intermediates in a synthesis of New Quinolones", <i>Heterocycles</i> , 1992, 34(2), 241-245	
	CS	Remuzon <i>et al.</i> , "Synthesis of (1R,4R,7S)- and (1S,4S,7S)-2-(4-Tolylsulfonyl)-5-phenylmethyl-7-methyl-2,5-diaabicyclo[2.2.1]heptanes via Regioselective opening of 3,4-Epoxy-D-proline with Lithium Dimethyl Cuprate", <i>J. Heterocyclic Chem.</i> , 1993, 30, 517-523	
	CT	Rosen <i>et al.</i> , "Design, synthesis, and properties of (4S)-7-(4-Amino-2-substituted-pyrrolidin-1-yl) quinolone-3-carboxylic acids", <i>J. Med. Chem.</i> , 1988, 31, 1598-1611	
	CU	Scott, David L. <i>et al.</i> , "Interfacial Catalysis: The Mechanism of phospholipase A ₂ ", <i>Science</i> , 1990, 250, 1541-1546	
	CV	Tanaka <i>et al.</i> , "A novel type of phospholipase A ₂ inhibitor, thjielocin A1B, and mechanism of action", <i>J. Antibiotics</i> , 1992, 45(7), 1071-1078	
	CW	Vishwanath, B.S. <i>et al.</i> , "Edema-inducing activity of phospholipase A ₂ purified from human synovial fluid and inhibition by aristolochic acid", <i>Inflammation</i> , 1988, 12(6), 549-561	
EXAMINER		DATE CONSIDERED	

Sheet 8 of 11

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. ISIS-2297	Serial No. 08/973,381
		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	CX	Washburn, W.N. and Dennis, E.A., "Suicide-inhibitory Bifunctionally linked Substrates (SIBLINKS) as phospholipase A ₂ Inhibitors", <i>Biol. Chem.</i> , 1991, 266(8), 5042-5048	
	CY	Wery et al., "Structure of recombinant human rheumatoid arthritic synovial fluid phospholipase A ₂ at 2.2 Å resolution", <i>Nature</i> , 1991, 342, 79-82	
	CZ	Wright et al., "Large scale synthesis of oligonucleotides via phosphoramidite nucleosides and a high-loaded polystyrene support", <i>Tetrahedron Letters</i> , 1993, 34(21), 3373-3376	
	DA	Wyatt et al., "Combinatorially selected guanosine-quartet structure is a potent inhibitor of human immunodeficiency virus envelope-mediated cell fusion", <i>Proc. Natl. Acad. Sci. USA</i> , 1994, 91, 1356-1360	
	DB	Yang, C. and Chang, L., "Studies on the status of lysine residues in phospholipase A ₂ from <i>Naja naja atra</i> (Taiwan cobra) snake venom", <i>Biochem. J.</i> , 1989, 262, 855-860	
	DC	Yuan, W. et al., "Synthesis and evaluation of phospholipid analogues as inhibitors of cobra venom phospholipase A ₂ ", <i>J. Am. Chem. Soc.</i> , 1987, 109, 8071-8081.	
	DD	"Pyrrolidine Derivatives", <i>Chem. Abstracts</i> 1987, 106:213757w, p. 644	
	DE	Ko, S.Y. et al., "p-Nitrobenzoate esters of epoxy alcohols: Convenient synthons for water-soluble epoxy alcohols", <i>J. Org. Chem.</i> , 1987, 52, 667-671	
	DF	Ko, S.Y. and Sharpless, K.B., "In situ opening of epoxy alcohols: A convenient alternative to the isolation of unstable epoxy alcohols", <i>J. Org. Chem.</i> , 1986, 51, 5413-5415	
	DG	Hanson, R.M., "The synthetic methodology of nonracemic glycidol and related 2,3-epoxy alcohols", <i>Chemical Reviews</i> , 1991, 91(4), 437-475	
EXAMINER		DATE CONSIDERED	

Sheet 9 of 11

Form PTO-1449 Modified		Docket No. ISIS-2297	Serial No. 08/973,381
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant Normand Herbert	
		Filing Date March 25, 1998	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	DH	Klunder et al., "Asymmetric Epoxidation of Allyl Alcohol: Efficient Routes to Homochiral β -Adrenergic Blocking Agents", <i>J. Org. Chem.</i> , 1986, 51, 3710-3712	
	DI	Klunder et al., "Arenesulfonate Derivatives of Homochiral Glycidol: Versatile Chiral Building Blocks for Organic Synthesis", <i>J. Org. Chem.</i> , 1989, 54, 1295-1304	
	DJ	Misiura et al., "Biotinyl and Phosphotyrosinyl Phosphoramidite Derivatives Useful in the Incorporation of Multiple Reporter Groups on Synthetic Oligonucleotides", <i>Nucleic Acids Res.</i> , 1990, 18, 4345-4354	
	DK	Ramirez et al., "Nucleotidophospholipids: Oligonucleotide Derivatives with Membrane-Recognition Groups", <i>J. Am. Chem. Soc.</i> , 1982, 104(20), 5483-5486	
	DL	Telser et al., "Synthesis and characterization of DNA oligomers and duplexes containing covalently attached molecular labels: comparison of biotin, fluorescein, and pyrene labels by thermodynamic and optical spectroscopic measurements", <i>J. Am. Chem. Soc.</i> , 1989, 111, 6966-6976	
EXAMINER		DATE CONSIDERED	

Sheet 10 of 11

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office				Docket No. ISIS-2297		Serial No. 08/973,381	
				Applicant Normand Herbert			
				Filing Date March 25, 1998		Group Not Yet Assigned	
U. S. PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Name	Class	Subclass	
	DM	5,288,514	02/22/94	Ellman	427	2	
	DN	5,324,483	06/28/94	Cody et al.	422	131	
	DO	3,687,808	08/29/72	Merigan, Jr. et al.	195	28	
	DP	5,210,264	05/11/93	Yau	558	167	
	DQ	5,218,105	06/08/93	Cook et al.	536	25.31	
	DR	3,856,835	12/24/74	Guillot	260	429.9	
	DS	5,144,045	09/01/92	Wissner et al.	549	219	
	DT	5,419,966	05/30/95	Reed et al.	428	406	
	DU	4,958,013	09/18/90	Letsinger	536	27	
	DV	5,212,295	05/18/93	Cook	536	26.7	
FOREIGN PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Country	Translation YES NO		
	DW	WO 91/19735	12/26/91	PCT	X		
	DX	WO 93/04204	03/04/93	PCT	X		
	DY	WO 94/08051	04/14/94	PCT	X		
	DZ	WO 93/07883	04/29/93	PCT	X		
	EA	WO 94/26775	11/24/94	PCT	X		
	EB	WO 94/24314	10/27/94	PCT	X		
EXAMINER				DATE CONSIDERED			

Sheet 11 of 11

Form PTO-1449 Modified				Docket No. ISIS-2297		Serial No. 08/973,381	
List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office				Applicant Normand Herbert			
				Filing Date March 25, 1998		Group Not Yet Assigned	
U. S. PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Name	Class	Subclass	
FOREIGN PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Country	Translation YES NO		
	EC	WO 94/27719	12/08/94	PCT	X		
	ED	WO 94/28028	12/08/94	PCT	X		
	EE	WO 94/28424	12/08/94	PCT	X		
	EF	WO 95/18623	07/13/95	PCT	X		
	EG	WO 95/18820	07/13/95	PCT	X		
	EH	WO 92/02532	02/20/92	PCT	X		
	EI	WO 87/01374	03/12/87	PCT	X		
	EJ	WO 91/13080	09/05/91	PCT	X		
	EK	WO 91/12331	08/22/91	PCT	X		
	EL	WO 92/03568	03/05/92	PCT	X		
	EM	WO 92/05186	04/02/92	PCT	X		
	EN	WO 92/02534	02/20/92	PCT	X		
	EO	WO 93/15221	08/05/93	PCT	X		
EXAMINER				DATE CONSIDERED			

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☐ **BLACK BORDERS**

☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

☒ **FADED TEXT OR DRAWING**

☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

☐ **SKEWED/SLANTED IMAGES**

☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

☐ **GRAY SCALE DOCUMENTS**

☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**

☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.